



Zeus-6000M Digital Inverter 용접기 사할린 설치 공사 건

Project Name :

P-6046_ARKUTUN_DAGI PROJECT

Full Digital Inverter Welding Machine



Superior performance and efficiency



EXXON NEFTEGAS LIMITED
Sakhalin-1 Project operator



**DAEWOO SHIPBUILDING &
MARINE ENGINEERING CO.,LTD.**



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Power source

**ZEUS 6000 M**

Full Digital Inverter Welding Machine

Serial No : P-6046 ARKUTUN_DAGI_2013-01 ~ 35

**WELDING PROCESS**

SMAW (Pulse)

GTAW

FCAW

GOUSING

GMAW

DSME
 대우조선해양
Power source specification

Mains voltage	3Ø x 380 V
Mains frequency	50 Hz
Mains fuse protection	50A
Primary continuous power	1Ø 16kVA
Cos phi	0,99
Degree of efficiency	90%
Duty cycle at 10 min / 40 °C	90% DC at 600A
Duty cycle at 10 min / 40 °C	100% DC at 500A
Open circuit voltage	70V [12V in the safe mode]



Power source specification

Welding process	Value (Min-Max)
Welding current , GMAW / FCAW	25 – 600A /CV
Welding current, TIG	25 – 350A /CC
Welding current, MMA	25 – 300A (Pulse function) /CC
Welding current, Gouging	750A (10Ø)
Arc voltage, GMAW	14,0 – 50V
Arc voltage, TIG	12,0 – 50V (Adjustable)
Arc voltage, MMA	20,0 – 50V
Degree of protection	IP23
Type of cooling	AF
Weight	ca 38 kg±3

※ CC : Constant Current, CV : Constant Voltage

2 FCAW 용접 기법 및 주변 장치



1. Wire feed units

Wire feeder (DSME)

Full Digital Inverter Welding Machine



Wire feeding voltage	DC 24V
Wire diameter	0.9mm~1.6mm
Wire type	FLUX / GMAW
Wire feeding speed	1~25 M/min
Wire spool	0.9mm~1.6mm
Max capacity of wire spool	20kg
Weight	8.5kg
Dimension L x W x H	190x400x240

3 FCAW 용접 현장



용접 완료 된 FCAW 용접부

3 GTAW 용접기법 및 주변장치



1. GTAW (TIG) welding Ignition device

Serial No : H-6064 – ID -01 ~ 35



Supply voltage	50-120V
Welding current with Duty 60% /100%	300A / 200A
Punch through cap in Ar agent 100%	5-7mm
Ignition pulse peak voltage	7000-8000V
Ignition pulse time	0.53usec
Ignition pulse period	0.15sec
Start up time	0.2sec
Generate pulse time	3sec
Weight	5kg
Dimension W x L x H	310x150x140 mm

2-1. GTAW (TIG) welding Remote Pendant & Cable



TIG Remote Pendant & Cable

Full Digital Inverter Welding Machine

Name	specification
1. Remote Pendant 2. Cable	1. First standard products 2. 0.75sq x 2C x 10m

Name	specification
I/D power Cable	1. 6sq x 1C x 1.5m 2. clamp

4 GTAW(TIG) 용접 현장



티타늄 GTAW 용접

파이프 배관 라인 용접



용접 완료 된 티타늄 GTAW 용접 비드

5 GTAW(TIG) 용접 현장



파이프 전 자세 6G GTAW 용접

배기구 설치

환기구 설치

작업자
인양 로프

산소 농도 측
정기 설치



듀플렉스강 GTAW 밀폐 구역 용접 중 **“안 전 제 일”**

6 GTAW(TIG) + SMAW 용접 현장



파이프 취부 준비



파이프 용접 준비



초층 GTAW 용접



GTAW 용접 완료



SMAW 용접



SMAW 용접 완료

7 SMAW (MMA) 용접 현장



파이프 플랜지 MMA 용접



구조물 MMA 용접

8 | 가우징(Gouging) 용접 현장



가우징 작업 중

개별 접지 설치
후 가우징 작업



가우징
작업





비파괴 (MT) 검사



사할린 바다위에서 비 바람 견디는 용접기



Zeus -용접기 (멀티형)



기존의 TIG/CO2/가우징 용접기

이동이 편리한 용접기



소형에,멀티에,이동에
무게가 38Kg
"혼자 해도 되네!"



기존 사용하던 각각의 용접기



1 . CO₂ welding single cable



CO₂ welding single cable

Full Digital Inverter Welding Machine

Name	specification
Zeus Digital DATA single cable	80sq x 6c x 50m

2 . Secondary output cable (ground)



Secondary output cable (ground)

Full Digital Inverter Welding Machine

Name	specification
Zeus secondary output cable (ground)	70sq x x 5m

3 . TIG Torch Cable (Air Cooled)

TIG Torch cable (Air Cooled)

Full Digital Inverter Welding Machine

Name	specification
Zeus TIG Torch cable	350A x 10m



4 . single cable (Extend)



single cable (Extend)

Full Digital Inverter Welding Machine

Name	specification
Zeus Digital DATA single cable	80sq x 6c x 30m (Extend)

5 . SMAW(MMA) Welding Holder



SMAW(MMA) Welding Holder

Full Digital Inverter Welding Machine

Name	specification
SMAW(MMA) Welding Holder	26sq x 10m

6 . Gouging Welding Torch



Gouging Welding Torch

Full Digital Inverter Welding Machine

Name	specification
Gouging Welding Torch	70sq x x 5m



7. Ground Cable (Extend)



Ground Cable (Extend)

Full Digital Inverter Welding Machine

Name	specification
Ground Cable (Extend)	70sq x5m /Clamp 500A

Full Digital Inverter Welding Machine

firstltd @ zeusweld.com

Superior performance and efficiency



First Power Electronics Co., Ltd

1349 GUANPYUNG -DONG YUSEONG-GU DAEJON 305-509, KOREA
TEL. 070-4640-5700 / FAX. 070-4640-5713